

MULTIMEDIA



UNIVERSITY

STUDENT ID NO.

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MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2016 / 2017 SESSION

PPE0044 – BASIC MICROECONOMICS

(Foundation in Business)

4 MARCH 2017

9.00 A.M. – 11.00 A.M.

(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of TEN (10) pages.
2. Answer **ALL** the questions in **Sections A and B**.
3. Shade your answers for **Section A** on the OMR sheet. Write your answers for **Section B** in the Answer Booklet.

SECTION A : MULTIPLE-CHOICE QUESTIONS [40 MARKS]

Instructions: Answer **ALL** questions in this section. Shade your answers on the **OMR** sheet.

1. Jason runs a small boutique in Australia. He tells one of his suppliers that he is willing to pay RM6 for a pair of wool hand warmers and not more than the stated price. Based on this information, we can conclude that his price elasticity of demand for wool hand warmers is _____.
 - A. zero
 - B. elastic
 - C. perfectly elastic
 - D. perfectly inelastic
2. The price elasticity of demand is equal to the _____.
 - A. value of the slope of the demand curve
 - B. change in quantity demanded divided by the change in price
 - C. percentage change in quantity demanded divided by the percentage change in price
 - D. percentage change in price divided by the percentage change in quantity demanded
3. Which of the following products comes closest to having a perfectly inelastic demand?
 - A. petrol
 - B. iPhones
 - C. bus rides
 - D. diabetes medication in general
4. Last year, Mike purchased 60 pounds of potatoes to feed his family of five when his household income was RM30,000. This year, his household income fell to RM20,000 and Mike purchased 80 pounds of potatoes. All else constant, Mike's income elasticity of demand for potatoes is _____. Mike considers potatoes to be a (n) _____.
 - A. negative; normal good
 - B. positive; inferior good
 - C. negative; inferior good
 - D. positive; normal good and a necessity
5. Two goods are considered as _____ if the cross elasticity of demand for computers and software is negative.
 - A. substitutes
 - B. complement
 - C. normal goods
 - D. inferior goods

Continued...

6. A decrease in the price of the product _____ if the demand for a product is inelastic.
- A. will increase total revenue
 - B. will decrease total revenue
 - C. will not change total revenue
 - D. all of the above
7. Suppose that the price of a product increases from RM0.75 to RM0.90 and quantity supplied rises from 8,000 units to 10,000 units. Use the midpoint formula to calculate the price elasticity of supply.
- A. 0.07
 - B. 0.82
 - C. 1.0
 - D. 1.22
8. Inelastic supply occurs whenever the elasticity of supply value is _____.
- A. positive and > 1
 - B. positive and < 1
 - C. negative and < -1
 - D. any positive number
9. The more _____ the demand is for a product, the _____ tax revenue that will be raised by taxing the product.
- A. elastic; more
 - B. inelastic; more
 - C. inelastic; less
 - D. tax revenues are unrelated to a product's price elasticity of demand
10. Nancy is consuming X and Y with her $MU_X/P_X = 6$ and $MU_Y/P_Y = 10$. In order to maximise utility, she should _____.
- A. consume more X and less Y
 - B. consume less X and more Y
 - C. consume less of both X and Y
 - D. continue to consume the same amount of X and Y since he is already maximizing utility

Continued...

Refer to **Exhibit 1** for question no.11.

Quantity (boxes)	Total Utility (TU)	Marginal Utility (MU)
0	0	-
1	30	30
2	50	20
3	A	16
4	B	12
5	86	C

Exhibit 1

11. **Exhibit 1** shows Adam's utility from popcorns. Adam's total utility from four boxes of popcorn is _____.
 - A. 66
 - B. 70
 - C. 78
 - D. 82
12. The principle of diminishing marginal utility means that the consumer surplus from the second slice of cake is _____.
 - A. less than from the first
 - B. greater than from the first
 - C. equal to that from the first
 - D. not comparable to that from the first
13. The substitution and income effects of a price decrease will _____ for normal goods.
 - A. not change the quantity demanded
 - B. both increase the quantity demanded
 - C. both decrease the quantity demanded
 - D. increase then decrease the quantity demanded
14. When a consumer's indifference curve _____ his budget constraint, it shows that the consumer satisfies the condition $MU_x/P_x = MU_y/P_y$.
 - A. crosses
 - B. is just tangent to
 - C. is completely below
 - D. is completely above
15. Carl can buy either tarts or pancake. If the prices of tarts and pancake triple and so does Carl's money income, we can conclude that Carl's budget constraint will _____.
 - A. remain unchanged
 - B. shift in but remain parallel to the old one
 - C. shift out but remain parallel to the old one
 - D. move in so that the slope of the budget constraint is tripled

Continued...

Refer to *Exhibit 2* for question no. 16.

Region	Money income (RM)	Price of bread (RM)	Price of pizza (RM)
A	100	20	2
B	50	10	5
C	25	5	4

Exhibit 2

16. *Exhibit 2* shows money income for three regions. In terms of units of bread, the real income is _____.
 A. equal in all three regions
 B. lower in region A than in regions B and C
 C. lower in region B than in regions A and C
 D. lower in region C than in regions A and B
17. Diminishing marginal returns implies _____.
 A. increasing marginal costs
 B. decreasing marginal costs
 C. decreasing average fixed costs
 D. decreasing average variable costs
18. _____ if marginal product is greater than average product.
 A. Average product must be decreasing
 B. Marginal product must be increasing
 C. Marginal product must be decreasing
 D. Marginal product could either be increasing or decreasing
19. The Lawn Ranger, a landscaping company, has total costs of RM4,000 and total variable costs of RM1,000. The Lawn Ranger's total fixed costs are _____.
 A. RM 0
 B. RM3,000
 C. RM5,000
 D. unable to calculate because the output is not given
20. A firm will begin to experience diminishing returns at the point where _____.
 A. marginal cost increases
 B. marginal cost decreases
 C. both B and C are correct
 D. marginal product increases
21. Average variable cost and average total costs get closer together as output increases because _____.
 A. diminishing returns set in
 B. economies of scale become apparent
 C. marginal costs decrease as output increases
 D. average fixed costs decrease as output increases

Continued...

22. In the short run when the marginal product of labour _____, the marginal cost of an additional unit of output _____.
- A. falls; rises
 - B. rises; rises
 - C. falls; falls
 - D. rises; doesn't change
23. For economies of scale, a(n) _____ in a firm's scale of production leads to _____ average total cost.
- A. increase; lower
 - B. decrease; lower
 - C. increase; higher
 - D. decrease; no change in
24. The marginal revenue of an individual firm _____ in a perfect competition market.
- A. is zero
 - B. equals its average revenue
 - C. exceeds its average revenue
 - D. is positive but less than its average revenue
25. As new firms enter in an industry, during the transition from short run to long run the price _____ and the economic profit for each existing firm _____.
- A. falls; increases
 - B. rises; increases
 - C. falls; decreases
 - D. rises; decreases
26. If a competitive firm is producing a level of output where marginal revenue exceeds marginal cost, the firm could increase profits if it _____.
- A. increase production
 - B. decrease production
 - C. temporarily shutdown
 - D. maintains production at the current level
27. You are hired as an economic consultant to The Rainbow Stationery Shop which is a perfectly competitive firm. This firm is currently producing at a point where market price equals its marginal cost. The Shop's total revenue exceeds its total variable cost, but is less than its total cost. You should advise the firm to _____.
- A. raise its price until it breaks even
 - B. lower its price so that it can sell more units of output
 - C. cease production immediately because it is incurring a loss
 - D. produce in the short run to minimise its loss, but exit the industry in the long run
28. Public franchises create monopolies by restricting _____.
- A. price
 - B. entry
 - C. profit
 - D. demand

Continued...

29. Marginal revenue is _____ when demand is elastic and _____ when demand is inelastic for a monopoly.
- A. positive; positive
 - B. positive; negative
 - C. negative; positive
 - D. negative; negative

Refer to *Exhibit 3* for question no.30.

Price (RM)	Quantity (units)
10	1
9	2
8	3
7	4
6	5
5	6
4	7

Exhibit 3

30. *Exhibit 3* shows the price and quantity for a monopoly firm. Suppose that this firm has a constant marginal and average cost of RM2 per unit of providing the product. The firm will maximise its profits by charging _____ per unit and selling _____ units of output.
- A. RM5; 6
 - B. RM6; 5
 - C. RM7; 4
 - D. RM8; 3
31. The inefficiency associated with monopoly is due to _____.
- A. the monopoly's losses
 - B. the monopoly's profits
 - C. overproduction of the good
 - D. underproduction of the good
32. Compared to a monopoly, the output of a perfectly competitive industry with the same costs is _____ the monopoly's output.
- A. less than
 - B. more than
 - C. the same as
 - D. not comparable to
33. All of the following are examples of price discrimination **EXCEPT** _____.
- A. student discounts at museums
 - B. mattress sales on Memorial Day
 - C. children's discounts at amusement parks
 - D. rental car companies charging lower prices to local residents than to out-of-state

Continued...

34. The social cost associated with the misrepresentation in consumption from a monopoly price is _____.
A. marginal cost
B. deadweight loss
C. patent protection
D. government failure
35. Which of the following is NOT an example of a monopolistically competitive market?
A. Supermarkets
B. Toothpaste producers
C. Automobile producers
D. Makers of women's clothing
36. A monopolistically competitive firm that is earning profits will, in the long run, experience all of the following EXCEPT _____.
A. new rivals entering the market
B. a decrease in demand for its product
C. a decrease in the number of rival products
D. demand for the firm's product becomes more elastic
37. Suppose Matthew owns a small bakery. Matthew wants to maximise his profit and he decides he needs to produce a quantity of bread which will minimise his average total cost. Will Matthew's strategy necessarily maximise profits for his bakery?
A. Not necessarily; This strategy will only maximise Jason's profit in the long run, but not in the short run.
B. No; In order to maximise profit, Jason would never want to produce the quantity where average total cost is minimised.
C. Not necessarily; Depending on demand, Jason may maximise profit by producing a quantity other than that where average total cost is at a minimum.
D. Yes; Since Jason's bakery is in a perfectly competitive market, the only way to maximise profit is to produce the quantity where average total cost is minimised.
38. In long-run equilibrium, compared to a perfectly competitive market, a monopolistically competitive industry produces a _____ level of output and charges a _____ price.
A. lower; lower
B. lower; higher
C. higher; lower
D. higher; higher
39. According to the kinked demand curve theory, each firm believes that if it lowers its price _____.
A. other firms will not lower theirs
B. other firms will also lower theirs
C. the government will impose a minimum price
D. the government will impose a maximum price

Continued...

40. The music streaming industry, where a firm's profitability depends on its interactions with other firms, is an example of _____.
- A. oligopoly
 - B. monopoly
 - C. perfect competition
 - D. monopolistic competition

SECTION B: STRUCTURED QUESTIONS [60 MARKS]

Instructions: Answer **ALL** questions in this section. Write your answers in the Answer Booklet.

Question 1

Part A

The Harrison family consumes 3 pounds of fish and 5 pounds of chicken per month. The price of fish is RM8 per pound and chicken is RM4 per pound.

- a) What is the amount of income allocated to fish and chicken consumption? (1 mark)
- b) What is the relative price of fish? (2 marks)
- c) Explain the meaning of relative price of fish you have calculated. (1 mark)
- d) If Harrison family maximise their utility, what is the ratio of the marginal utility of fish to the marginal utility of chicken? (2.5 marks)
- e) If the price of chicken rises, will the Harisson family consume more chicken, less chicken, or the same amount of chicken? Briefly explain. (3 marks)

Part B

Betty has RM100 to spend each month on bread and chicken. Suppose the price of bread is RM4 a loaf and the price of chicken is RM5 per pound.

- a) Draw her budget constraint and label it BC_0 . Put bread on the horizontal axis and chicken on the vertical axis. Be sure to identify the intercept values. (2.5 marks)
- b) Suppose Betty is maximising her utility and she consumes 10 loaves of bread and 12 pounds of chicken. On the same graph you drew in part draw an indifference curve to identify her optimal bundle. Label this bundle "E." (2 marks)
- c) Is her budget exhausted? Verify your answer. (2 marks)
- d) Now suppose Betty's income falls to RM80. Prices however remain unchanged. In the same diagram, graph her new budget constraint and label it BC_1 . Be sure to identify any new intercept values. (1.5 marks)

Continued...

- e) Following the change in income, can Betty consume the same bundle "E"? Explain your answer. (1.5 marks)
- f) What must happen to her total utility following the decrease in her income? (1 mark)
- [TOTAL 20 MARKS]**

Question 2

Part A

Jack operates a small boat factory. He can make ten boats per year and sell them for RM25,000 each. It costs Jack RM150,000 for the raw materials to build the ten boats. Jack has invested RM400,000 in the factory and equipment needed to produce the boats: RM200,000 from his own savings and RM200,000 borrowed at 10% interest (assume that Jack could have loaned his money out at 10%). Jack can work at a competing boat factory for RM70,000 per year.

- a) What is the total revenue Jack can earn in a year? (1 mark)
- b) What are the explicit costs Jack incurs while producing ten boats? (1.5 marks)
- c) What is the value of Jack's accounting profit? (1.5 marks)
- d) What is the value of Jack's economic profit? (1.5 marks)

Part B

Exhibit 4 shows sweater manufacturing plant cost function. The fixed costs of producing the sweater are RM16.

Quantity	Variable cost (RM)	Total cost (TC)	Average fixed cost (AFC)	Average variable cost (AVC)	Average total cost (ATC)	Marginal cost (MC)
0	0	16				
1	18	34				
2	31	47				
3	41	57				
4	49	65				
5	59	75				
6	67	86				

Exhibit 4

Based on **Exhibit 4**,

- a) calculate AFC, AVC, ATC and MC. (12 marks)
- b) explain the relationship between ATC and MC. (1.5 marks)
- c) what is the efficient scale? How do you identify the efficient scale? Explain. (1 mark)

[TOTAL 20 MARKS]

Continued...

Question 3

Exhibit 5 contains information about the revenues and costs for Nina's Basketball Manufacturing. Assuming Nina's Basketball manufacturing is a perfect competitive firm. The price for the basketball will be RM3.

Quantity	Total Revenue (TR), P = RM3	Total Cost (TC) RM	Profit (RM)	Marginal Revenue (MR) RM	Marginal Cost (MC) RM
0		1			
1		2			
2		4			
3		7			
4		11			
5		16			

Exhibit 5

Based on the above,

- complete ***Exhibit 5*** in the answer booklet provided. (9 marks)
- what is the profit-maximising level of production? State the reason for your answer. (2 marks)
- if Nina charges RM3 per basketball, is she at a short run or long run equilibrium? (1 mark)
- suppose that the price of basketball falls to RM2. Calculate the total revenue (TR) and profits at each level of output as in ***Exhibit 5***. (6 marks)
- which price will Nina benefit more? Why? (2 marks)

[TOTAL 20 MARKS]

End of paper